EXHIBIT

		Page 1		
1	UNITED STATES DISTRICT COURT			
2	EASTERN DISTRICT OF TENNESSEE			
3	x			
4	ULTIMA SERVICES CORPORATION,			
5	Plaintiff,			
6	No. 2:20-cv-00041-DCLC-CRW			
7	-against-			
8	U.S. DEPARTMENT OF AGRICULTURE, U.S.			
	SMALL BUSINESS ADMINISTRATION, SECRETARY			
9	OF AGRICULTURE, and ADMINISTRATOR OF THE			
	SMALL BUSINESS ADMINISTRATION,			
10				
	Defendants.			
11				
12				
	March 7, 2022			
13	10:03 a.m. (EST)			
14				
15	DEPOSITION of Dr. Jon Wainwright, the			
16	Expert Witness in the above-entitled			
17	action, held at the above time and place,			
18	taken before Garry J. Torres, a			
19	Stenographer and Notary Public of the			
20	State of New York, pursuant to the Federal			
21	Rules of Civil Procedure, Notice and			
22	stipulations between Counsel.			
23				
24	* * *			
25				

Page 2	Page 4 1 JON WAINWRIGHT, the Expert	
2	2 Witness herein, having first been duly	
CENTER FOR INDIVIDUAL RIGHTS 3 Attorneys for Plaintiff	3 sworn by the Notary Public, was examined	
ULTIMA SERVICES CORPORATION	4 and testified as follows:	
4 1100 Connecticut Ave, NW	5 MR. ROSMAN: Dr. Wainwright, I'm	
Suite 625 5 Washington, D.C. 20036	6 Michael Rosman. I'm the one of the	
TEL: (202) 833-8400	7 attorneys for the plaintiff in this	
6 EMAIL: scott@cir-usa.org	8 case. I'll be asking you a series of	
7 BY: MICHAEL E. ROSMAN, ESQ. 8	9 questions which you should wait 'til I	
9 CHRISTINE DINAN, ESQ.	finish the question and then answer.	
Attorneys for Defendants	11 If you don't understand a question	
10 11	12 that I've asked please feel free to	
ALSO PRESENT:	13 let me know on what you don't	
MICHELLE SCOTT	14 understand and I might choose to	
MICHELLE SCOTT 13 ANDREW BRANIFF	15 rephrase it.	
K'SHAANI SMITH	16 If we need to take break at	
14 JULIET GRAY * * *	17 points or we will need to take a break	
15	-	
16	at points, but if you need to take a break at points let us know and I'll	
17 18	1	
19	20 try to find an appropriate spot to do21 that.	
20		
21 22	You have been deposed before, sir?	
23	24 THE WITNESS: Yes.	
24	25 MR. ROSMAN: All right. I'm	
25		
Page 3	Page 5	
1 STIPULATIONS 2 IT IS HEREBY STIPULATED AND AGREED. by	going to try to introduce your CV.You have a copy of it though, right?	
, , ,	3 THE WITNESS: I do.	
3 and among counsel for the respective		
4 parties hereto, that the filing, sealing	,	
5 and certification of the within deposition		
6 shall be and the same are hereby waived;7 IT IS FURTHER STIPULATED AND AGREED	Now, can everybody else I tried to introduce the CV as an exhibit as	
	8 Exhibit 1. Does everybody else have	
8 that all objections, except as to form of	9 that available to them now?	
9 the question, shall be reserved to the 10 time of the trial;		
, and the second	,	
11 IT IS FURTHER STIPULATED AND AGREED	 up on any of my screens. MR. ROSMAN: It says my exhibit 	
12 that the within deposition may be signed	, ,	
13 before any Notary Public with the same	has been introduced.	
14 force and effect as if signed and sworn to	14 (Whereupon, an off-the-record	
15 before the Court.	15 discussion was held.) 16 MR POSMAN: Why don't we just	
10	MR. ROSMAN: Why don't we just	
17	17 go through some of your background, 18 Dr. Weinwright, and we'll worry about	
18	Dr. Wainwright, and we'll worry about	
19	19 the introduction of the exhibit at	
20	20 some point.	
21	21 EXAMINATION	
22	22 BY MR. ROSMAN:	
23	Q. What is your name?	
24	24 A. Jon Wainwright.25 Q. Where do you reside?	
25	Q. Where do you reside?	

Page 162 1 testimony that some of the 53,000 initial 2 records never got used in the report 3 because you didn't want to, I think you 4 said, muddy the waters by including them. Could you explain a little bit 6 more what you meant by that? Yeah, muddy the waters maybe 8 isn't the right phrase. It was more to 9 keep things clear and understandable in my 10 own mind as much as anything else. I 11 think I mentioned there were --12 I'll just take a hypothetical 13 study that would have looked at all the 14 contracts in construction, all the prime 15 contracts in construction and all the 16 subcontracts in construction. 17 But then went further and 18 divided the construction contracts up into 19 contracts over \$200,000, contracts under 20 \$25,000, contracts between \$25,000 and 21 \$200,000 or contracts that were subject to

22 MBE goals versus contracts that weren't

I think looking at those

23 subject to MBE goals.

Page 164 1 consistent across the studies -- the 205 2 studies and what was being measured as it 3 could be and save those other records for 4 an analysis for another day. Q. So would it be fair to say that 6 that data was excluded because it was not 7 necessarily consistent with what you were 8 trying to doing with your analysis? 9 A. Yes. 10 MR. ROSMAN: Objection to form. 11 Q. So for the disparity studies in 12 the group of 205 that you looked at that 13 didn't use statistical significance 14 testing, do you think the evidence from 15 those studies is still reliable? A. Yes. That was the whole point 17 of doing the metaanalysis was to see what 18 we could learn regardless of the -- some 19 significant differences between the 20 studies and how they were performed. 21 They were done by different 22 consultants, at different points in time, 23 with different levels of resources and 24 using different methodologies for either 25 assessing statistical significance or not,

25 statistics would all be interesting in Page 163 1 their own right, but I was -- I didn't 2 want to be asked a question possibly, 3 well, if you included these others, how 4 did they make the resulting disparities 5 larger or smaller or change them. And so I was trying to come 7 up -- those 27,000 records are -- you 8 know, roughly all looking at the same kind 9 of items in those disparity studies 10 because not all studies looked at 11 contracts with and without goals or broke 12 contracts down by size categories or just 13 looked at federal funding versus state 14 funding. 15 And since none of those issues 16 as far as I knew were really at issue in 17 this report, I took them out. I 18 didn't -- I don't even know what the 19 results would be if they would be stronger 20 or weaker or different at all if I 21 included those. 22 It's not like I ran the results 23 and didn't like them and threw that stuff 24 out. I just was trying to come up with a 25 data set that -- you know, really was as

Page 165 1 or measuring availability and -- you know, 2 that was kind of the whole point of my 3 metaanalysis is to see -- you know, what, 4 if anything, we could learn regardless of 5 some of those differences or something you 6 might be able to critique about any single 7 study standing alone. Q. Earlier Mr. Rosman asked you 9 about whether NERA studies account for 10 capacity and you mentioned that you don't 11 know if capacity, as Mr. Rosman defined 12 it, then could be measured. 13 Would you explain a bit more 14 what you meant by that? 15 A. Well, I think I'm not sure it's 16 fair to say Mr. Rosman actually defined 17 it, but he gave me an example, I believe, 18 which was the ability to do work, which is 19 not something I'm aware of any statistical 20 measure of. 21 You know, it's like 22 qualifications. There's all different 23 aspects to qualifications and capacity. I 24 tried to control for and include as many

25 as I could in the different sections of

Page 166 Page 168

1 the report. I can do that better in --

2 with some data sets than with others.

So in the PUMS data there's all

4 kinds of additional variables that speak

5 to qualifications and capacities that I

6 was able to include. Some of the

7 disparity studies attempt to directly

8 incorporate capacity into their measures

9 or whatever capacity means.

It means different things for 10

11 different consultants and different

12 attorneys. But -- you know, some

13 disparity study consultants try to

14 incorporate some aspects of capacity

15 directly into their availability measures.

And I -- you know, we looked at

17 those as well. I have my own way of doing

18 it and I think I've outlined -- you know,

19 in great detail how and why I choose to do

20 it that way, but the main reason is to

21 avoid including variables that themselves

22 could be negatively impacted by

23 discrimination.

24 So to try to measure and test

25 for the presence of discrimination by

1 I mean you're not in business

2 unless you're trying to do business, by

3 and large, and further in the regression

4 analyses in those NERA studies, there's

5 all kinds of different measures in

6 qualifications and capacity. Human

7 capital or education levels being one of

8 the most important.

In your opinion, do you believe

10 the disparities you talked about earlier

11 in tables 2.2 to 2.8 could be caused

12 exclusively by sex discrimination?

13 A. No. That's -- having researched

14 in this area for over a quarter of a

15 century now or maybe a third of a century,

16 I would say absolutely not.

17 I see evidence routinely of both

18 kinds. It's also the case and this is

19 just anecdotal as I sit here today but

20 most of those ethic groupings, the

21 majority of businesses in those groupings

22 by race and ethnicity are male.

So to -- you know, the concept

24 that somehow there is -- no race

25 discrimination and sex discrimination is

Page 167

1 using variables that are themselves

2 potentially subject to discrimination,

3 like, most economists will tell you is

4 wrong headed.

So -- you know, that's why I did

6 what I did, but again, the purpose of the

7 metaanalysis was to say -- you know, all

8 those different approaches are welcome.

9 Let's see if we can determine any

10 commonalities across these studies despite

11 that or did they all reach completely

12 different conclusions.

Q. Are some measures for capacity

14 as you might define it included in your

15 studies?

16 A. Yes.

17 How would you define capacity?

Well, again, I don't know that

19 there's a single definition but we, for

20 example, in our measures of availability

21 we're only looking at firms that are

22 currently in business, in the relevant

23 geographic market, in those relevant NAICS

24 codes, product markets that matter, all of

25 those things speak to capacity.

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1 exclusively driving the results I'm seeing

2 does not comport with my own experience as

3 a researcher over all that time, nor does

4 it I think mathematically make sense

5 because women still tend to be

6 significantly less than half of the

7 businesses in those ethic categories.

Q. Just to confirm one point in

9 your answer, were you saying to your

10 knowledge that the majority of those -- of

11 the businesses in the data sets were owned

12 by men?

13 You broke up a little bit there.

I was just trying to confirm. 14

15 Were you in your answer saying that the

16 majority of the business you looked at in

17 the data that you studied were owned by

18 men?

19 A. Yes.

20 In your opinion do you believe

21 the disparities in tables 4.1 to 4.9 could

22 be caused exclusively by sex

23 discrimination?

24 A. No.

25 Just stepping back a moment as

Page 170 Page 172 1 we've discussed there were three main 1 it's really the only dedicated census of 2 sections of your report. Could you just 2 minority business. So it's interesting 3 and valuable I think for the judge and for 3 briefly explain why that is and how you 4 believe they interact with each other? 4 anybody reading this report in its own A. Sure. The first section, just 5 right. It also allows you to across the 6 board test for statistical significance in 6 looking at the disparity studies, what 7 that establishes primarily, at least to my 7 a way that at least some of the disparity 8 mind, is that there are very large and 8 studies in the first section don't always 9 allow you to do. So I think it helped 9 adverse disparities facing every single 10 kind of minority business, pretty much in 10 fill that gap. 11 every single state of the union that at 11 And then in the final section of 12 least the 30 or 40 that are represented 12 the report was really meant to examine 13 here, and across different time periods 13 this question of -- because it's not the 14 pretty much, if not consistently, across 14 case that the only thing driving 15 procurement categories. You know, no one 15 disparities is discrimination. As I 16 single category stands out as having no 16 mentioned in the report there, tends to be 17 disparities. 17 more business ownership tends to rise with 18 So the first section of the 18 age, for example. Successful business 19 report was simply to establish that do 19 outcomes tend to be positively correlated 20 these disparities exist in the first 20 with education levels, for example. 21 place, and what you can learn from this 21 So it is a very fair question to 22 metaanalysis of the 205 studies is yes, 22 ask if qualifications and capacity factors 23 they do. 23 like that explain these large and adverse 24 They tend to be -- they tend to 24 and statistically significant disparities. 25 25 exist for all these different minority And I think my general Page 171 Page 173 1 conclusion from the third section is that

1 groups. They tend to exist across all the 2 different consultants that do the studies 3 across all the different periods of time 4 that we looked at and across all the 5 different industry categories at whatever 6 level of disaggregation that we were able 7 to look at. But I think as I even opened the 9 second or third section of my report with 10 is it's fair to ask and the reason those 11 other sections are in there is A, there's 12 not a whole lot of data anyway that's 13 dedicated to minority business owners or 14 minority businesses. 15 So it behooves us to try to look 16 at everything that is out there and is 17 available, but it's fair to ask if the 18 disparities that we see in these 205 19 studies are due to some factor could be 20 caused or explained by factors other than 21 discrimination. 22 And so really the -- the second 23 section of the report is really partly 24 meant to, A, to just look at the SBO data

2 they explain some of the disparities, but 3 they leave huge residuals that are 4 unexplained even after controlling for a 5 very large number of other relevant human 6 capital and financial endowment factors. 7 So to me I think that's why 8 maybe I harped on why all three sections 9 are important to be considered in tandem 10 or as a whole because they address -- you 11 know, it's only --12 I think only by looking at all 13 three sections together do you -- do you 14 see the clear picture of at least what I 15 was trying to establish is do these 16 disparities exist, did they tend to be 17 isolated to particular groups or 18 particular states or particular 19 industries. 20 You know, do they exist, yes; 21 are they isolated to any of those 22 particular groups or categories, no; do 23 they tend to be statistically significant, 24 yes; and finally can they be explained by

25 and the ABS data because it exists and

25 other factors besides -- are they

5	
Page 174 1 consistent with the possibility that other	Page 176 1 out that if discrimination exists, it
2 factors relevant to economic outcomes can	2 doesn't take a great leap of logic to
3 explain them and the answer to that is no.	3 understand that it would manifest itself
4 So all those things together I	4 in lower revenues.
5 think makes the whole package that I've	5 Q. No, to be sure. But I guess
6 tried to that I wanted to look at and	6 what I'm saying is if they're not caused
7 tried to present.	7 by discrimination, aren't you omitting a
8 Q. Thank you. That's all the	8 very important variable that you might
9 questions I have.	9 otherwise attribute to discrimination?
10 MR. ROSMAN: I'm just going to	10 A. I think if you wanted to look at
11 follow up on one of the things that	11 that you'd put revenues on the left-hand
12 Ms. Dinan asked you about.	12 side of the equation and look at that and
13 EXAMINATION	13 some disparity study consultants have done
14 BY MR. ROSMAN:	14 exactly that and still found large and
15 Q. You said you were concerned	15 adverse significant disparities.
16 about including variables that could	16 Q. I'm done.
17 themselves be affected by discrimination.	17
18 How could you assess whether or not a	18 (Whereupon, the Deposition of
19 variable like firm size has been affected	19 Dr. Jon Wainwright conducted via Zoom
20 by discrimination?	videoconference concluded at 4:13 p.m.
21 A. Assessing it is not easy, but	21 (EST) on Monday, March 7, 2022.)
22 following the logic is a little easier.	22
23 If there is discrimination in the market	23
24 aimed at preventing minority business from	24
25 emerging, how is that going to manifest	25
Page 175	Page 177
1 itself, it's going to manifest itself in	1 I have read the foregoing transcript
2 lower levels of sales, fewer contracts	2 of my deposition, and find it to be
3 that are won, higher prices being charged	3 true and accurate to the best of my
4 by suppliers, all of those things are	4 knowledge and belief?
5 going to filter their way into revenues.	5
6 So controlling for revenues, for	6
7 example, would be like controlling for pay	7
8 in a pay discrimination investigation. So	8 JON WAINWRIGHT
9 I mean that is if there is	9
10 discrimination in the market, that is one	10 Sworn and subscribed to before me,
11 place you're going to see it is in	11 On this day
12 earnings or revenues and whether firms	12 of 2022.
12 earnings or revenues and whether firms13 become formed in the first place.	12 of 2022. 13
 12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 	12 of 2022. 13 14
 12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 15 whole chapter in the national guidelines 	12 of 2022. 13 14 15
 12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 15 whole chapter in the national guidelines 16 to try to explain why that is and I think 	12 of 2022. 13 14 15 16 Notary
12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 15 whole chapter in the national guidelines 16 to try to explain why that is and I think 17 most economists understand why you would	12 of 2022. 13 14 15 16 Notary 17 My Commission Expires
12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 15 whole chapter in the national guidelines 16 to try to explain why that is and I think 17 most economists understand why you would 18 not put those variables on the right-hand	12 of 2022. 13 14 15 16 Notary 17 My Commission Expires 18
12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 15 whole chapter in the national guidelines 16 to try to explain why that is and I think 17 most economists understand why you would 18 not put those variables on the right-hand 19 side of a regression.	12 of 2022. 13 14 15 16 Notary 17 My Commission Expires 18 19
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12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 15 whole chapter in the national guidelines 16 to try to explain why that is and I think 17 most economists understand why you would 18 not put those variables on the right-hand 19 side of a regression. 20 Q. Let me follow up. If you assume 21 that they're caused by discrimination,	12 of 2022. 13 14 15 16 Notary 17 My Commission Expires 18 19 20 21
12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 15 whole chapter in the national guidelines 16 to try to explain why that is and I think 17 most economists understand why you would 18 not put those variables on the right-hand 19 side of a regression. 20 Q. Let me follow up. If you assume 21 that they're caused by discrimination, 22 aren't you just assuming the answer to the	12 of 2022. 13 14 15 16 Notary 17 My Commission Expires 18 19 20 21
12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 15 whole chapter in the national guidelines 16 to try to explain why that is and I think 17 most economists understand why you would 18 not put those variables on the right-hand 19 side of a regression. 20 Q. Let me follow up. If you assume 21 that they're caused by discrimination, 22 aren't you just assuming the answer to the 23 question that you're trying to answer?	12 of 2022. 13 14 15 16 Notary 17 My Commission Expires 18 19 20 21 22 23
12 earnings or revenues and whether firms 13 become formed in the first place. 14 So that's why and I there's a 15 whole chapter in the national guidelines 16 to try to explain why that is and I think 17 most economists understand why you would 18 not put those variables on the right-hand 19 side of a regression. 20 Q. Let me follow up. If you assume 21 that they're caused by discrimination, 22 aren't you just assuming the answer to the	12 of 2022. 13 14 15 16 Notary 17 My Commission Expires 18 19 20 21

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ERRATA
p12
line 2 midwest fence should be Midwest Fence
line 3 disadvantaged business enterprise should be Disadvantaged Business Enterprise
line 15 Rothy should be Roth throughout
line 23 Rothy Two should be Rothe II
p13
line 10 DV should be DC
p14
lines 22-23 Cossman should be Kossman
p23
line 5 defendant's expert should be defendant's expert report
p27
lines 21-22 Econ Salt should be Econsult
p34
line 18 alluded should be eluded
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line 50 procontractor should be prime contractor
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line 60 Prince George should be Prince George's
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line 24 minority should be minorities
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line 19 could should be could have
p80
line 8 DOJ should be did DOJ
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line 14 ADS should be ABS
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p108 line 10 business should be census p125 line 7 clients should be client's p129 line 1 American community survey should be American Community Survey p149 Lowery should be Lowrey throughout p149 Fairley should be Fairlie throughout p153 line 3 interest in dividence should be interest and dividend p157 lines 17-18 bureau of labor statistics should be Bureau of Labor Statistics lines 21-23 bureau of labor statistics should be Bureau of Labor Statistics, bureau of economic analysis should be Bureau of Economic Analysis, census bureau should be Census Bureau p159 line 5 census bureau should be Census Bureau p169 line 7 ethic should be ethnic

p170 line 11 union that should be union or

p171 line 10 it's should be it line 19 factor could should be factor that could

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1 2			VERITEXT LEGAL SOLUTIONS 2	
3			CASE NAME: GUTTMA SERVICES CORPORA 3. ALUS, DEPARTMENT OF AGRICULTURE OF	
: 4		AGE	DATE OF DEPOSITION: MARCH 7, 2022	 .
5	William Exercise 101. Dr		4 WITNESS NAME: DR. JON WAINWRIGHT 5 PAGE/LINES) CHANGE REASON	
-	DR JON WAINWRIGHT MR, ROSMAN	5, 174	1 1 1 1	
6		-,		See attached
'	DR. JON WAINWRIGHT MS. DINAN	160		
7		•	· *	
. 8			9	
9	EXHIBITS		10	
;10	PLAINTIFF'S DESCRIPTION PAGE	£	11	
11	Exhibit I Curriculum Vitae 5			
12			13 // / /	
13				
14	Attorney Mr. Rosman from Center For		¹⁴	
į	Individual Rights has retained all	!	15	
115	exhibits.		:6	
16			27	
17	INSERTIONS		18 /	
. 18	Page Linc '			
j 19	None		1º Ann Wannet A.	
20			20 JON WAINWRIGHT	
21	REQUESTS		21	
22	Page Line		SUBSCRIBED AND SWORN TO 22 BEFORE ME THISDAY	
23	None		Q5, 20022.	
24		. !		
25		:	24 NOTARY PUBLIC 25 MY COMMISSION EXPERES	_
1	CERTIFICATION	rage 179		
; 2				
3	I, Garry J. Torres, a Notary Public			:
4				•
1 -	hereby certify:			
6	That, Dr. Jon Wainwright, the witness			
	whose testimony as herein set forth, was			
	duly swom by me; and that the within			•
	transcript is a true record of the			
10	testimony given by said wimess.			
11	I further certify that I am not			
; 12	related to any of the parties to this			
13	action by blood or marriage, and that I am			
	in no way interested in the outcome of			
	this matter.			
16	IN WITNESS WHEREOF, I have hereunto			
	set my hand this 17th day of March, 2022.			
18	A			
19	1			
1 '				
20	1.0000 1.1700000	:		
20	GARKY J. TORRES			
21				
22				
23				
24				
25				

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